

## **REMARKS**

In the Office Action mailed July 6, 2009, claims 1, 3 and 4 were rejected as being obvious based upon §103(a) over JP 2002-012990 (JP '990) in view of US 5,211,663 to Kovacs.

Claims 5-9 were rejected for obviousness under §103(a) based upon US Patent Publication 2003/0162077 to Ohtani et al. in view of US 6,440,598 to Fukui et al., the '663 patent to Kovacs, and US 4,382,825 to McCready.

Clarifying amendments are presented herein to independent claims 1 and 5. In view of these amendments, claims 3 and 8 have been cancelled. And, the dependency of claim 4 has been amended. It is respectfully submitted that in view of the clarifications presented herein, that all claims 1, 4-7 and 9 are in condition for allowance.

### **A. Rejection of Claims 1, 3 and 4 Based Upon JP '990 and US '663 to Kovacs Must be Withdrawn**

Independent claim 1 has been amended to recite a thermal drying process, i.e. "after immersing the stainless steel member, the member is then dried by being held at 100 to 200°C." No new matter is added by this amendment since support is found in the application as originally filed, and in particular in original claim 3.

#### **1. Thermal Drying Process**

The thermal drying process carried out at 100 to 200°C as recited in amended claim 1 has an effect of drying the stainless steel by vaporizing washing water adhered to a passivated coating film on a surface of the stainless steel and also an effect of stabilizing the passivated coating film on the surface of the stainless steel

and thus improving the corrosion resistance of the stainless steel. These advantageous effects are also evidenced by lower corrosion current densities shown in Figure 3 of the present application. The thermal drying process carried out at a specific temperature range as recited in claim 1 and the advantageous effects achieved by the thermal drying process are not shown or taught by any of the cited references.

## **2. Air-bubbling**

Claim 1 also recites an operation of air bubbling external air into the alkaline solution.

As repeatedly explained, the bubbling technique shown in JP '990 relies on vapor bubbles produced by cavitation and impingement of the cavitation vapor bubbles on a surface of a treated object or work surface to increase an electric potential of the work surface to thereby form a passivated coating film on the work surface. Cavitation forms vapor bubbles in a liquid by reducing the pressure in a region of the liquid and, hence, there is no need to introduce air external to the liquid. Furthermore, vapor bubbles produced by cavitation do not increase the amount of oxygen dissolved in the liquid, as required by claim 1 of the present application.

In contrast, air-bubbling shown in Kovacs is not conducted during a passivation treatment but done before the passivation treatment for adjusting a pH of a treatment solution. Due to the differences in intended use of the air-bubbling, there is no motivation to substitute the cavitation vapor bubbling as taught by JP '990 with the air-bubbling as taught by Kovacs. It is respectfully submitted that in the

absence of a reference that clearly teaches "air bubbling external air into the treatment solution during a passivation treatment", the Examiner's rejection of claim 1 based on the combination of JP '990 and Kovacs is unsupported.

For at least these reasons, it is respectfully submitted that independent claim 1 is patentable over the limited teachings of the JP '990 document and the '663 patent to Kovacs. Since claim 1 is patentable over the cited art, so too is claim 4 dependent therefrom. Claim 3 has been cancelled and so the rejection of that claim is moot.

**B. Rejection of Claims 5-9 Under 35 USC §103 Based on US 2003/0162077 to Ohtani in View of US Patent 6,440,598 to Fukui, the '663 Patent to Kovacs et al., and Further in View of US 4,382,825 to McCready Must be Withdrawn**

Independent claim 5 has also been amended to specifically recite that the thermal drying process is carried out at 100 to 200°C.

None of the cited references describe the particular thermal drying process now recited in claim 5 as amended. The primary reference to Ohtani et al. is silent as to any type of thermal drying process. Fukui et al., although heating a stainless steel substrate, is readily distinguishable on a variety of other grounds. As previously noted in the discussion of independent claim 1, Kovacs et al. entirely fails to teach the recited thermal drying operation. And McCready is also silent as to the features associated with the thermal drying step.

For at least these reasons, it will be appreciated that Ohtani in view of Fukui, and Kovacs et al. and further in view of McCready, are simply not relevant to the method recited in independent claim 5. Since independent claim 5 is believed to be patentable over the cited art, so too are claims 6-9, dependent therefrom.

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Respectfully submitted,

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